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SEARCH REQUEST FORM

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Art Unit 3743 Location (Bldg/Room#): CPK1 11854 Phone (circle 305 306 308) 3925

Serial Number: 09/660,733 Results Format Preferred (circle): PAPER DISK E-MAIL

Title of Invention "Method and Apparatus for Temperature Gradient Control in an Electronic System"

Inventors (please provide full names): James Wilson, Timothy Fletcher,
Lucian Brasier, James Mason

Earliest Priority Date: Sep 13, 2000

Keywords (include any known synonyms registry numbers, explanation of initialisms):

- ① turbulence inducing structure (disposed along a fluid passageway)
- ② predetermined temperature profile
- ③ thermally conductive
- ④ protrusions
- ⑤ cold plate
- ⑥ aluminum silicon carbide (AlSiC)
- ⑦ tubing
- ⑧ stainless steel
- ⑨ dimples or fins
- ⑩ fluid supply device
- ⑪ electronic components
- ⑫ phased array antenna system
- ⑬ isothermal

Please write detailed statement of the search topic, and the concept of the invention. Describe as specifically as possible the subject matter to be searched. Define any terms that may have a special meaning. Give examples of relevant citations, authors, etc., if known. You may include a copy of the abstract and the broadcast or most relevant claim(s).

Invention relates to a thermally conductive flat plate or "cold plate" having a fluid passageway or tubing formed therein, a plurality of turbulence-inducing structures or fins or dimples formed in the wall or by the wall of the passageway or tubing, a fluid flowing through the passageway or tubing, where the protrusions or dimples or fins or other turbulence inducing structures are spaced along the passageway or tubing in such a way as to achieve an isothermal or otherwise predetermined temperature profile in the plate along the passageway.

STAFF USE ONLY: Application could be in a phased array antenna system, or electronic cooling.

Searcher: Julie Wallco

Type of Search

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Vendors (include cost where applicable)

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Date Picked Up: 11/13/02

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 N.A. Sequence A.A. Sequence Structure (#) Bibliographic Litigation Fulltext Procurement Other STN Questel/Orbit Lexis/Nexis WWW/Internet In-house sequence systems (list) Dialog Dr. Link Westlaw Other (specify)

The flat plate is made of AlSiC or stainless steel.

GPI5

HPIQ

HPIJ

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... The advantages of steered beam **phased array antenna** are numerous: ... This is particularly useful for **turbulence** studies since it allows quicker detection for full ...

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... To set up a **phased-array antenna**, one needs to measure the pointing ... and is a function of frequency, power output, atmospheric stability, **turbulence**, and, most ...

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... The range of the **turbulence** is determined from the delay between the transmission of the acoustic pulse, and the reception of the ... **Phased Array Antenna Option**. ...

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... Applications 2000 10 The University of New Mexico What is **Phased Array Antenna**? ... and high speed optical communication subsystem I Atmospheric **turbulence** and its ...

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... development and testing of methods for a derivation of **turbulence** parameters in ... The figure shows the **phased-array antenna** surrounded by an about 2m high frame ...

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... Optoelectronic Device and System Development for Imaging Through **Turbulence**. ... Polymer-Based Photonic **Phased-Array Antenna** System Based on Detector- Switched ...

65.105.56.185/master18/category72-15.html - 17k - [Cached](#) - [Similar pages](#)**L. Pastur - english CV**

... Weak wave **turbulence** in the Faraday experiment. ... CSF as Contingent Scientist: Implementation of a new "all-optical" architecture for a **phased-array antenna**. ...

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... 16 April 2002 Instruments 31 PHARS - a SAR testbed * C-band Synthetic Aperture Radar

* active **phased array antenna** (1 dimensional) * 8 T/R modules deliver 160 ...

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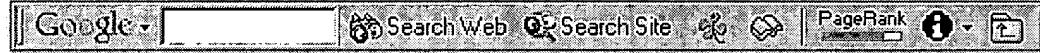
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... closed loop control of laser beams for anoptical **phased array antenna** to be ... Self-heating effects will be included by performing non **isothermal** simulations in ...

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... CA 90501 Title: A MMW Source for a New **Phased-Array Antenna** Architecture Topic ... High-Bandgap

Nitrid= es Topic #: AF 95-179 Firm: **ISOTHERMAL SYSTEMS RESEARCH, INC** ...

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... The rapid-scanning, **phased-array antenna** will be fitted with several hundred transmitting ... The facility has three independent **isothermal** zones heated by sodium ...

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Smart Structures and Materials 1994: Smart Materials

... increases the final transformation stress relative to **isothermal** transformation. ... These composites would be used in **phased array antenna** systems, therefore, the ...

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... power standards. A power standard of **isothermal** type was recognised as the best alternative for future development. SSIA institute ...

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